

## Section 815 - Antennas and Towers

**815.01 Purpose and Objectives.** The purposes and objectives of this Section are to provide for the safe installation of antennas, dish antennas and towers and to minimize the adverse aesthetic impact of antennas, dish antennas, and towers on surrounding properties, while permitting reasonable reception and transmission of signals from antennas, dish antennas and towers without excessive costs on the owners of antenna, dish antennas and towers and to facilitate wireless telecommunications services to residents and business. To lessen the adverse aesthetic impact on surrounding properties because of the unsightly nature of antennas, dish antennas and towers, and preserve the high quality residential character of Edina, and to ensure that antennas, dish antennas, and towers are installed in a manner that can withstand high winds and other adverse weather conditions and do not constitute a nuisance or pose a safety concern, the Council has determined to impose size, height, location and installation restrictions and requirements on antennas, dish antennas and towers. The different size and shapes of antennas, dish antennas and towers results in different degrees of adverse aesthetic impact on surrounding properties and different safety concerns. Because of the different aesthetic impacts and safety concerns this Section imposes different location, size, height and installation restrictions and requirements for antennas, dish antennas and towers. In particular, this Section imposes different restrictions and requirements for dish antennas. The size and shape of dish antennas make them more obtrusive and less likely to blend in with their surroundings which results in a greater adverse aesthetic impact on surrounding properties than antennas and towers and the shape of dish antennas makes them subject to a high amount of wind force because the dish shape will trap wind, with the larger the dish or higher the supporting structure resulting in greater wind force on the base of the structure. In determining these differing restrictions and requirements the Council has considered what size and height is necessary for an antenna, dish antenna and tower to provide quality use and afford reasonable reception and transmittal of signals and believes that the location, size, height and installation restrictions and requirements of this Section permit antennas, dish antennas and towers to reasonably receive and transmit their intended signals and do not impose excessive costs on owners of antennas, dish antennas and towers.

This section also provides a process for considering modifications to the requirements of this Section in order to provide suitable sites for towers and antennas and encourage innovation in tower and antenna designs while protecting other properties in the vicinity from the adverse aesthetic impact of towers and antennas.

**815.02 Definitions.** Words and phrases used in this Section which are defined in Section 850 of this Code shall be construed in this Section according to their definitions contained in Section 850. The following words and terms shall have the following meanings in this Section:

**Antenna.** Equipment used for transmitting or receiving telecommunication, television or radio signals, which is located on the exterior of, or outside of, any building or structure. For purposes of this Section, "antenna" does not include "dish antenna".

**Commercial Use Antenna or Tower.** An antenna or tower erected for a personal wireless telecommunication service or for any other purpose other than for the private use and enjoyment of the owner of the tower or antenna and the premises upon which it is located, including amateur radio antennas and antennas receiving television signals for personal use.

**Dish Antenna.** A parabolic shaped antenna (including all supporting apparatus) which is used for transmitting or receiving telecommunication, television or radio signals, which is located on the exterior of, or outside of, any building or structure.

**Height.** The vertical distance from the tower's, antenna's, or dish antenna's point of contact with the ground, or rooftop to its highest point, including all attachments and supporting apparatus.

**Personal Wireless Telecommunication Service.** Licensed commercial wireless services including cellular, personal communication services (PCS), specialized mobile radio (SMR), enhanced mobilized radio (ESMR), paging, and similar services that are marketed to the general public.

**Public Utility.** Persons, corporation, or governments supplying gas, electric, transportation, water, sewer, or land line telephone service to the general public. For purposes of this Section, personal wireless telecommunication service facilities shall not be considered as public utilities.

**Tower.** Any pole, spire or structure, or any combination, thereof including all supporting lines, cables, wires and braces, intended primarily for the purpose of mounting an antenna or dish antenna.

**815.03 Permit Required; Exemptions.** No antenna, dish antenna or tower of any kind shall be erected, constructed or placed, or re-erected, re-constructed or replaced, anywhere within the City without first making an application for and obtaining a permit from the City. Provided, however, no permit shall be required for the following:

- A. Dish antennas not greater than nine square feet in cross sectional area, which do not exceed six feet in height.
- B. All towers or other antennas which do not exceed six feet in height.
- C. Antennas, dish antennas and towers erected or constructed by the City for City purposes.
- D. Structures and facilities directly related to the provision of services by a public utility including but not limited to water towers, lights, signals, power and telephone poles, and poles supporting emergency warning devices.

**815.04 Application for Permit; Issuance; Fee.** Application for a permit required by this Section shall be made to the Building Official in the same manner, and containing the same information, as for a building permit pursuant to Section 410 of this Code. The application shall be accompanied by the fee set forth in Section 185 of this Code. Such permit shall be issued by the Building Official.

**815.05 General Requirements.** All antennas, dish antennas and towers, for which a permit is required shall comply with the following requirements:

Subd. 1 **Compliance with Applicable Provisions.** All applicable provisions of Section 410 of this Code, including wind loading requirements set forth in the State Building Code.

Subd. 2 **Grounding.** Antennas, dish antennas and towers shall be grounded for protection against a direct strike by lightning and shall comply, as to electrical wiring and connections, with all applicable provisions of this Code and State law.

Subd. 3 **Proximity to Power Lines.** No antenna, dish antenna or tower shall exceed a height equal to the distance from the base of the antenna, dish antenna or tower to the nearest overhead electrical power line (except individual service drops), less five feet. Monopoles designed to comply with the wind loading requirements of the International Building Code need not conform to the requirements of this Subd. 3.

Subd. 4 **Protection from Climbing.** Antennas, dish antennas or towers shall be protected to discourage climbing by unauthorized persons.

Subd. 5 **Restrictions on Attachments.** No antenna, dish antenna or tower shall have affixed to it any signs, banners or placards of any kind, (except one sign not over ten square inches in area may be affixed indicating the name of the manufacturer or installer) nor shall any lights, reflectors, flashers or other illuminating devices be affixed except as required by the Federal Aviation Administration or Federal Communications Commission.

Subd. 6 **Prohibited Attachments.** No tower shall have constructed on it, or attached to it, in any way, any platform, catwalk, crow's nest or similar structure except structures necessary for the maintenance of antennas.

Subd. 7 **Construction Material Restrictions.** All towers shall be constructed of corrosive-resistant steel or other corrosive-resistant, non-combustible materials. Towers shall not be constructed or made of wood, including timbers or logs.

Subd. 8 **Prohibited Extensions.** No part of any antenna, dish antenna or tower nor any lines, cables, equipment, wires or braces used in connection with any tower or antenna shall, at any time, extend across or over any part of a street, sidewalk or alley.

Subd. 9 **Design of Personal Wireless Communication Service Towers.** Personal wireless communication service towers shall be of a monopole design and shall blend into the surrounding environment through the use of color, camouflaging and other architectural treatment

Subd. 10 **Antennas Attached to Buildings.** Antennas which are attached to any facade of a building or structure shall as closely as possible match the color of the underlying building material.

Subd. 11 **Interference with Public Safety Telecommunications.** No new or existing telecommunications service shall interfere with public safety telecommunications.

**815.06 Location and Screening.**

Subd. 1 **Setbacks.** No part of any tower, dish antenna or antenna shall be constructed, located or maintained, at any time, permanently or temporarily, within any setback required by Section 850 of this Code for an accessory building or structure for the Zoning District in which the antenna, dish antenna or tower is located.

Subd. 2 **Additional Restrictions for Towers and Antennas in Excess of 30 Feet in Height.** The following minimum distance shall be provided between towers which exceed 30 feet in height, and the buildable area of the nearest lot in the R-1 or PRD-1 District which is used for residential purposes:

| <u>TOWER HEIGHT</u> | <u>MINIMUM DISTANCE</u>                     |
|---------------------|---|
| 75 feet or less     | Four times the heights of the tower/antenna |
| More than 75 feet   | Six times the height of the tower/antenna   |

Subd. 3 **Additional Restrictions for R-1 and R-2 Districts.** In addition to the requirements of Subd. 1 and Subd. 2 of this Subsection, the following requirements apply to lots in the R-1 District and R-2 District as established by Section 850 of this Code other than lots in the R-1 District developed with a conditional use:

A. Dish antennas.

1. Dish antennas greater than nine square feet in cross section area shall not be located on the roof or exterior wall of a principal or accessory building.
2. Dish antennas shall only be located in the rear yard.

B. All antennas and towers including dish antennas.

1. No antenna, dish antenna or tower shall be located in the front yard.
2. No antenna, dish antenna or tower, shall be constructed, located or maintained, at any time, permanently or temporarily, closer to the allowed buildable area of a principal building on any adjacent lot than it is to the principal building on the lot on which it is located.

Subd. 4 **Screening for Dish Antennas.** The Building Official may require, as a condition to a permit, that a dish antenna installed in a non-residential district be screened from residential districts located within 100 feet of the dish antenna. Such required screening shall comply with the requirements of Subd. 2 of Subsection 850.10 of this Code.

Subd. 5 **Proximity to Other Towers.** No personal wireless telecommunications service tower in excess of 50 feet in overall height shall be erected within 1000 feet of any other personal wireless telecommunication service tower exceeding 50 feet in overall height. It

is the intent of this provision to encourage the co-location of telecommunication facilities on the same tower or on existing buildings or other structures thereby reducing the number of towers in the City.

**Subd. 6 Commercial Use Towers and Antennas Prohibited in the R-1, R-2, PRD-1 and PRD-2 Districts.** Subject to the requirements of this Section, towers and antennas of all kinds may be erected in the R-1, R-2, PRD-1, and PRD-2 Districts only for the private telecommunication use of the residents of the premises. This prohibition does not apply to properties in these districts developed with conditional uses, publicly owned property, cemeteries and golf courses.

**Subd. 7 Commercial Use Towers Prohibited in Other Residential Districts.** Towers and ground mounted antennas may be erected in the PRD-3, PRD-4, PRD-5, PSR-3, and PSR-4 Districts only for the private telecommunication use of the residents of the premises. Subject to the requirements of this Section, commercial use antennas may be affixed to buildings in these Districts.

#### **815.07 Height Restrictions.**

**Subd. 1 Certain Residential Districts.** In the R-1, R-2, PRD-1 and PRD-2 Districts except lots developed with conditional uses as established by Section 850 of this Code, publicly owned property or golf courses:

- A. Except as provided in Subd 4 of this Subsection 815.07, no ground mounted antenna, ground mounted tower or ground mounted tower with an antenna shall exceed 30 feet in height.
- B. Towers and antennas mounted on or attached to a building or structure shall not extend higher than 18 feet above the highest point of the building or structure.
- C. Dish antennas shall not be in excess of 12 feet in height.

**Subd. 2 Certain Residential and Non-residential Districts.** In the PRD-3, PRD-4, PRD-5, PSR-3, PSR-4, MDD-3,4,5,6, POD-1, PCD-1,2,4, APD and RMD Districts and on lots in the R-1 District developed with conditional uses, publicly owned property or golf courses:

- A. No ground mounted antenna, ground mounted tower or ground mounted tower with an antenna shall exceed 75 feet in height.
- B. Roof mounted antennas and towers shall not extend higher than 18 feet above the highest point of the building or structure.
- C. Dish antennas shall have an overall height of no more than 18 feet.

**Subd. 3 PCD-3, POD-2 and PID Districts.** In the PCD-3, POD-2 and PID Districts as established by Section 850 of this Code:

- A. No ground mounted antenna, ground mounted tower or ground mounted tower

with antenna shall exceed 125 feet in height.

B. Roof mounted antennas and towers shall have a height of no more than 18 feet above the highest point of the building or structure.

C. Dish antennas shall have an overall height of no more than 18 feet.

**Subd. 4 Amateur Radio Antennas.** In accordance with the Federal Communications Commission's preemptive ruling PRB1, towers and antennas erected for the primary purpose of supporting amateur radio communications may exceed the height restrictions of Subd. 1 of this Subsection 815.07 but shall not exceed 65 feet in height.

**815.08 Co-Location Requirements.** No permit shall be issued for a personal wireless communication service tower measuring 75 feet or more in height unless the tower is designed in all respects to accommodate facilities for at least one additional user. Such towers must be designed to allow for the rearrangement of antennas to accommodate new antennas mounted on the tower.

**815.09 Existing Antennas and Towers.** Existing antennas, dish antennas and towers which do not conform to or comply with this Section are subject to the following provisions:

**Subd. 1 Use and Replacement.** Existing antennas, dish antennas and towers may continue to be used for the purposes now used and as now existing, except as provided in Subd. 2 of this Subsection, but may not be replaced, expanded, enlarged or added to in any way without complying in all respects with this Section, except that antennas may be replaced, without so complying, provided the new antenna or dish antenna fully complies with the provisions of this Section.

**Subd. 2 Destroyed or Damaged Antennas, Dish Antennas or Towers.** If an antenna, dish antenna or tower is damaged or destroyed due to any reason or cause whatsoever, the same may be repaired and restored to its former use, location and physical dimensions upon obtaining a building permit but without otherwise complying with this Section. Provided, however, that if the cost of repairing or restoring such damaged or destroyed antenna, dish antenna or tower would be 50 percent or more, as estimated by the Building Official, of the cost of purchasing and erecting a new antenna, dish antenna or tower of like kind and quality and to the former use, physical dimensions and location, then the antenna, dish antenna, or tower may not be repaired or restored except in full compliance with this Section.

**815.10 Number of Antennas, Dish Antennas and Towers In Residential Districts.** No more than one exempt antenna, as provided in Subsection 815.03, one dish antenna requiring a permit under the provisions of this Section, and one tower with antennas shall be allowed at any one time on any lot in a residential district used for residential purposes.

**815.11 Modifications.** A modification to any requirements of this Section shall be processed in the manner as a variance as set forth in Subd. 1 of Subsection 850.04 of this Code. If the requested modification pertains to the requirements of Subd 2 or Subd 5 of Subsection 815.06, the Zoning Board of Appeals shall, in addition to other facts and circumstances, find the

following:

- A. The proposed location is essential for the operation of the telecommunications system as determined by a qualified professional engineer.
- B. Existing towers or other structures in the vicinity cannot accommodate the proposed communication facilities due to inadequate structural capacity as documented by a qualified professional engineer.
- C. Existing towers or other structures in the vicinity cannot accommodate the proposed communication facilities due to interference with existing or planned communication facilities as documented by a qualified professional engineer.
- D. Existing towers or other structures in the vicinity cannot accommodate the proposed communication facilities due to inadequate height as documented by a qualified engineer.
- E. Owners of existing towers or other structures in the vicinity have denied permission to located the proposed communication facilities on such existing towers or other structures.
- F. The proposed tower or antenna has been designed to reduce or eliminate adverse effects on adjoining properties including visual obtrusiveness.

**815.12 Abandoned Antennas, Dish Antennas and Towers; Removal.** Any antenna, dish antenna or tower which is not used for twelve successive months shall be deemed abandoned and may be required to be removed in the same manner and pursuant to the same procedures as for dangerous or substandard buildings established by Section 470 of this Code.

**815.13 Interpretation.** It is not the intention of this Section to interfere with, abrogate or annul any covenant or other agreement between parties. Where this Section imposes a greater restriction upon the use of premises for antennas, dish antennas or towers than are imposed or required by other Sections of this Code, rules, regulations or permits, or by covenants or agreements, the provisions of this Section shall govern.

*History: Ord 812 adopted 6-10-71; amended by Ord 812-A1 6-17-81, Ord 812-A2 6-12-85, Section 815 codified 8-26-92, Ord 1992-3 adopted 11-2-92, Ord 1997-5 8-18-97; Ord 2004-4, 4-29-04; Ord 2008-03, 03-03-08*

*Cross Reference: Section 185, 410, 850; Subsection 850.10*